ABSTRACT OF THE DISCLOSURE

Damping of mechanical oscillation in a shaft that is provided by feedback wherein the output signals of multiple feedback devices are negatively coupled and added to a desired speed signal of a motor speed controller of the driving motor is disclosed. At least one sensor and/or measuring system can be provided for measuring an actual position value. The actual speed of the shaft can be determined by differentiation from the shaft position value measurements or by integration from shaft acceleration measurements. The measured or actual speed of the shaft can be supplied as an input signal to each feedback element. Each feedback element is specifically tuned to an oscillation frequency range of the shaft that is to be damped. The invention provides an easy and cost-effective way of damping mechanical oscillations that have limited frequency ranges.